

than the general ground-colour. Moreover, from the head to the shoulders the spots are solid, like those of the Hunting-Leopard. In their large size, oblong or circular form, and wide separation from one another, they are quite unlike the spots on the same part of the body of the African Leopard, which are also solid.

The fur, which is relatively long all over the body, becomes still more markedly so on the under-parts, where it is pure white, with solid elongated black spots of very large size, but widely separated from one another. In this respect the skin is nearer to the Indian than to the African Leopard, in which the fur of the under-parts is yellowish, with the spots so large as to exhibit only a network of light ground. The resemblance of the under-parts of the present specimen to the corresponding region of the Snow-Leopard is remarkably striking; and a similar resemblance is exhibited by the very long and bushy tail, especially the terminal third, which is black and white only.

That the present specimen is, however, only a well-marked local variety of the Leopard I am quite convinced; and if I am right in identifying it with the so-called *Felis tulliana*, the latter animal must also be looked upon as a race of the same species, under the title of *F. pardus tulliana*. This will accordingly be the North-eastern representative of the species; and it will be interesting to find where it passes into the ordinary Indian form, to which it is clearly nearer than it is to the African. It is stated by Mr. Blandford to range into Baluchistan and the confines of Sind.

I may add that I am fully convinced of the advisability of separating the Indian from the African race of the Leopard; but there comes the puzzling question as to which is entitled to bear the name of *typicus*.

## 7. On the supposed former Existence of a Sirenian in

St. Helena. By R. LYDEKKER.

[Received June 12, 1899.]

In no zoological nor distributional work<sup>1</sup> with which I am acquainted can I find any reference to the alleged occurrence of a Manati in St. Helena. Nevertheless, there are records to the effect that an animal going by that name formerly inhabited that island. For example, Mr. J. C. Melliss, in his work on St. Helena<sup>2</sup>, definitely states that a Manati once occurred there, and goes so far as to express his opinion that it was specifically identical either with *Trichechus americanus* or *T. senegalensis*. I am also informed by my friend Mr. R. A. Sterndale, now Governor of the island, that Manatis were formerly of such frequent occurrence that there was a regular government duty on each one killed.

<sup>1</sup> Both Mr. Wallace in 'Island Life' and Messrs. Sclater in 'Geography of Mammals' are silent on this subject.

<sup>2</sup> 'St. Helena: a Physical, Historical, and Topographical Description of the Island.' London, 1875, pp. 86 & 87.

In answer to my enquiries, Mr. Sterndale wrote to me as follows on the subject<sup>1</sup>:—"The last appearance recorded of the Manati in St. Helena was in 1810, when one came ashore at Stone Top Valley beach, and was shot by a Mr. Burnham. It measured seven feet, and ten gallons of oil were obtained from it. Another was seen the same year in Manati Bay.

"In the old records I find, March 20, 1690, it thus entered—'Tuesday, Goodwin and Coales brought up for killing a Sea-Cow, and not paying the Company's Royalty. They desire pardon, and say the Sea-Cow was very small; the oyle would not amount to above four or five gallons.'

"Again, on the 11th September, 1739, 'A Sea-Cow killed upon Old Woman's Valley beach, as it was lying asleep, by Warrall and Greentree.'"

This evidence, I take it, may be regarded as amply sufficient to prove the former occurrences of a marine mammal at St. Helena. And from the name "Manati Bay" given to a spot on the S.W. coast, it further seems evident that the animal in question was far from uncommon; although, on the other hand, it never seems to have been abundant. In addition to this, the name of the bay, and the application of the title Manati or Sea-Cow to the animal itself, seem to be evidence in favour of the Sirenian nature of the latter; for, so far as I am aware, such names are not misapplied in popular language to Seals. And there are no Seals known from the island. Moreover, if the creatures in question had been Seals they would almost certainly have been numerous, while they would not have been exterminated so easily. Against the Sirenian nature of the animal may, however, be urged the mention of the killing of a specimen asleep on the beach, since it is generally stated that there is no decisive evidence that Sirenians ever voluntarily come ashore<sup>2</sup>. Too much importance must not, however, be attached to this, seeing that it is, in the first place, mainly negative evidence, while, in the second place, it might not be applicable in the case of an extinct species, with which we may have to do in this instance. It decisively shows that the animal was not a Cetacean.

With regard to the idea of the St. Helena animal being identical with either the African or the American Manati, it appears to me that this is impossible. In the first place, although it is conceivable that an individual might once and again be carried from either shore to the island, it is quite out of the question that this could have been a case of common occurrence. And, accordingly, if the creature were a Sirenian at all, it must have been a denizen of the coast of the island. But such a coast, without a single river-mouth or estuary, would have been quite unsuited to the habits of Manatis, as we now know them. A Dugong might perhaps live there; but then there is no evidence of the existence of those animals in the Atlantic.

If, then, the St. Helena animal were a Sirenian at all (on which

<sup>1</sup> The same extracts in a rather briefer form are given by Melliss.

<sup>2</sup> See Flower and Lydekker: 'Study of Mammals,' p. 214.

point I do not wish at present to express a definite opinion), the probability is that it was at least an extinct species, if not a genus.

Could the existence of a St. Helena Sirenian be definitely determined, it would be of much interest in regard to the history and distribution of the group. Mr. Sterndale, who is convinced that the creature was a "Manati," has promised to make a thorough search in the island for any remains that may have escaped destruction; but I fear that any successful results are in the highest degree improbable. The best chance would be to thoroughly examine the shore at Manati Bay, especially if there are any raised beaches.

8. On the Brain of *Hydrochærus*. By FRANK E. BEDDARD, M.A., F.R.S., Prosector and Vice-Secretary of the Society.

[Received June 6, 1899.]

In a communication made to this Society some years since<sup>1</sup> I dealt with the cerebral convolutions of a considerable number of genera of Rodents. Among the more important types which I was unable to study on that occasion was the genus *Hydrochærus*. I was able, however, to refer to a published description of this genus accompanied by illustrations by M. Camille Dareste. Inasmuch as *Hydrochærus* has the largest and best convoluted brain of any Rodent<sup>2</sup>, and as I have been able to study three excellently preserved brains extracted from specimens which have died in the Gardens, I think it worth while to add what I find myself in a position to do to Dareste's relation and interpretation of fact.

That author had two brains at his disposal, but has only figured the dorsal aspect of one. His paper also contains figures of a lateral and a ventral view.

*General External Features of the Brain of Hydrochærus.*

M. Dareste has represented fairly accurately the external features of the brain, save for one particular: I find that in my well preserved brains there is no such hiatus as he figures between the cerebral hemispheres and the cerebellum. The somewhat pointed anterior end of the cerebellum fits in fairly closely between the divergent extremities of the cerebral hemispheres. Moreover the general outline of the hemispheres is by no means so triangular as he has represented it to be. It is indeed almost a hexagon, of a much more graceful figure.

As to the under surface: one of my specimens, which was in an exceptionally perfect state of preservation, enables me to add to Dareste's description and, I believe, improve upon his figure.

<sup>1</sup> "On the Convolutions of the Cerebral Hemispheres in certain Rodents," P. Z. S. 1892, p. 596.

<sup>2</sup> "Note sur le Cerveau des Rongeurs, &c.," Ann. Sci. Nat. (4) iii, p. 355.